

METHOD FOR UNPATTERNED RESIST ETCH BACK OF SHALLOW TRENCH ISOLATION REFILL INSULATOR

ABSTRACT OF THE DISCLOSURE

A method for forming shallow trench isolation structures is provided that includes forming a plurality of isolation trenches (32) in a substrate (10) where the isolation trenches (32) separate active areas (18). An insulation layer (44) is formed outwardly from the substrate (10) with the insulation layer (44) filling the isolation trenches (32) and covering the active areas (18). A planarization layer (46) is formed outwardly from the insulation layer (44). The planarization layer (46) and the insulation layer (44) are removed together at a substantially even rate down to a polish stop (14) outward from the active areas (18).